

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 10-142472

(43)Date of publication of application : 29.05.1998

(51)Int.CI.

G02B 7/04

(21)Application number : 08-302942

(71)Applicant : NIKON CORP

(22)Date of filing : 14.11.1996

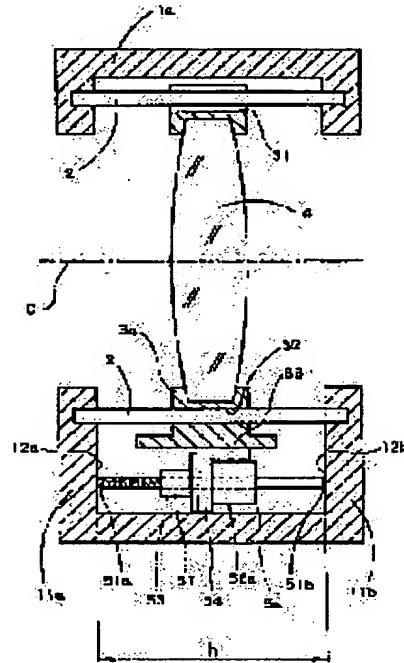
(72)Inventor : YAMAMOTO AKIRA

(54) LENS DRIVING MECHANISM

(57)Abstract:

PROBLEM TO BE SOLVED: To accurately move a lens in an optical axis direction though the number of parts is reduced and the device is not assembled with high accuracy.

SOLUTION: A motor 5a where both ends 51a and 51b of a rotor shaft 51 are projecting from a motor casing 56a, a male screw is formed on the rotor shaft 51, a nut member 53 in which the rotor shaft 51 is screwed is fixed in the motor casing 56a, and the rotor shaft 51 is advanced and retreated while it is rotated is used as a motor for driving a lens frame. A surface 12a coming into contact with the 1st end 51a of the rotor shaft 51 and a surface 12b coming into contact with the 2nd end 51b of the rotor shaft 51 are formed in a fixed barrel 1a. In the motor 5, the rotor shaft 51 is nearly parallel with an optical axis C, and the motor casing 56a is fixed in a lens frame 3a in a state where the rotor shaft 51 is put between the surfaces 12a and 12b of the fixed barrel 1a.



LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]

Copyright (C); 1998,2003 Japan Patent Office